Q Z X

The Journal Covering Amateur Radio and Sinclair Computers
ZX80; Micr0-Ace; ZX81; TS1000, 1500, and 2068; QL; Z88
Alex. F. Burr, K5XY, Publisher
2025 O'Donnell Drive
Las Cruces, NM
88001

Volume 10 Number 2 ($1.50 / issue) 1991 JANUARY

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EDITOR'S NOTES

K5XY

My word processor was at it again. When I tried to call up a file it crashed. Thus I tried a new word processor on the last issue. One of the effects was that the size of the type was reduced. I have returned to the usual size in this issue because a number of people said that it was easier to read.

RMG Enterprises, who have a very large stock of Sinclair related supplies, say that they have a good supply of replacement key-labels for the TS2068. They also say that you can get a current price sheet for specific Sinclair equipment without buying a complete catalog by enclosing a self addressed envelope and a requesting the price and availability of particular items of interest.

The FDD Newsletter, which tracks the use of the TMX Portuguese disk drives, included a illuminating offer this month. That disk drive equipment comes with the CP/M operating system. The newsletter is offering a 10 disk introductory package. These disks include some tremendous programs, including WordStar 4.0, DBase II, SuperCalc, and three communications programs. There are a few drawbacks to this disk system, even if it is specifically designed for the TS2068. The biggest one is that, because each disk will hold only 148 K of data, it is recommended that you put three or four drives in the interface box. Unfortunately,no mention was made as to how to get these disks. So, if you are interested, you might write to the newsletter at 1274 49the St, Brooklyn NY.

In this issue there is a QZX calendar. I know, it is a bit late for a calendar even if this is the January issue, but I was browsing some old newsletters from other groups and saw the prototype of this calendar and could not resist putting it in. The newsletter was from the Sinclair Louisville Users Group and used the same method of generating the numbers for the year that is used here. They even used the words QZX, a fact that I overlooked when I first saw the calendar several years ago. I suspect that long-time QZX subscriber WA4BQE, Ed, had something to do with that. Anyway, on the last page is another calendar for 1992.

The News is Out!
And We're Spreading It!
RMG is adding so many NEW and EXCITING TIMES to our line that our storerooms are BULGING! We have added more than 25 NEW PAGES and changed over 20 others in our BIG 40+ page catalog. We want to make sure that you do not miss jour on anything we may be able to help you with in your computing.
If you will send us $3.00 you will recieve our catalog with a $3 off coupon for your first order. AND, send along 12 business size SASE's and you will recieve 12 monthly updates and special mailings. $5 discount coupon in first mailing!

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UNCLASSIFIED ADS

WANTED: UNCLASSIFIED ADS for publication in QZX. Cost is 1 cent for each keystroke (characters, blanks, etc.). Payment must be included with order. This is an excellent way to sell your program or unwanted equipment, ask for help, or find a specific program. Send your ad with payment to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

FREE: One Byte-Back M 16 16 K RAM (no printed circuit board on the feed through socket). Contributed by KA8THG. It would be appreciated if a contribution toward the mailing expenses were made. Send requests to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

FOR SALE: Timex 1000 with power supply, instruction book, and 16 K RAM. $9 (plus $2 for shipping). Alex. F. Burr, 2025 O'Donnell, Las Cruces, NM 88001.

FOR SALE: CP/M books. Almost new. Half original price. *The Programmer's CP/M Handbook* by Andy Johnson-Laird. Osborne. Hardback. 500 pages $419. *The Byte Guide to CP/M* by Mark Dahmke. Mc Graw Hill. 250 pages. $8.50. *CP/M Users Guide* by Thom Hogan. Osborne. 330 pages. $8.95. *The CP/M Plus Handbook* by Alan R. Miller. Sybex. 250 pages. $7.5. *Inside CP/M Plus* by David E. Cortesi. Holt-Rinehart. 260 pages. $9.25. *CP/M Bible* by Waite and Angermeyer. Howard Sams. 430 pages. $9.90. *Users Guide to CP/M Systems* by Bove and Rhodes. Baen. 300 pages. $4.50. $1.00 each shipping and handling. A. F. Burr, 2025 O'Donnell, Las Cruces, NM 88001.

Z80 INFO

K5XY

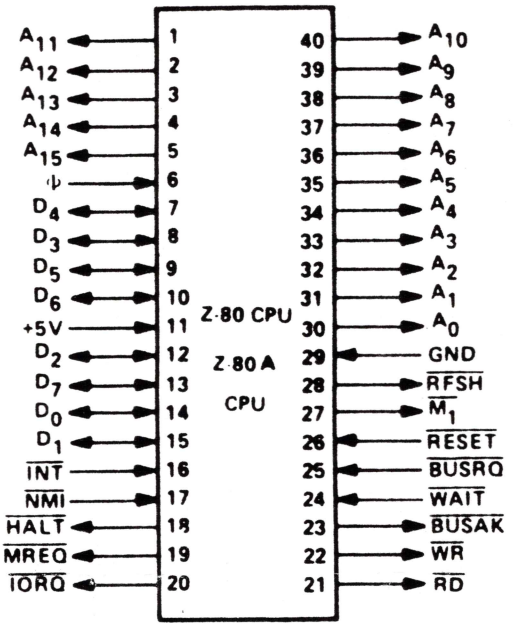
The next page contains a large diagram of the Z80 integrated circuit which is the basic building block of our computers (except for the QL, which uses a cpu made by Motorola). This page is a good reference to the dimensions of the IC and to the uses to which each pin is put.

There is an interesting story behind this chip. The Z80 was probably the most popular cpu ever made. It was much more popular than the 8086 or 8088. Unfortunately, the Zilog company ,which produced it, was not able to make a successor to rival the 80286. So the company has more or less disappeared. I do not k now the details of this story, but it would make a good case history for a MBA course.

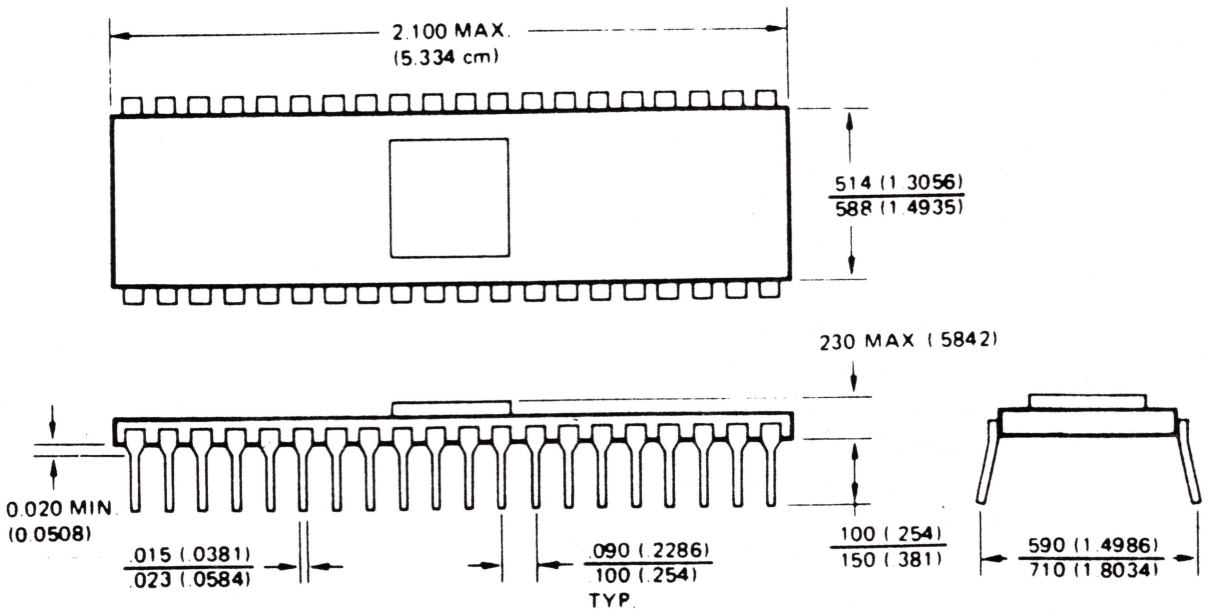
FIGURE 1-1
Z80 pinouts

Details of the Z80 cpu used by Sinclair computers

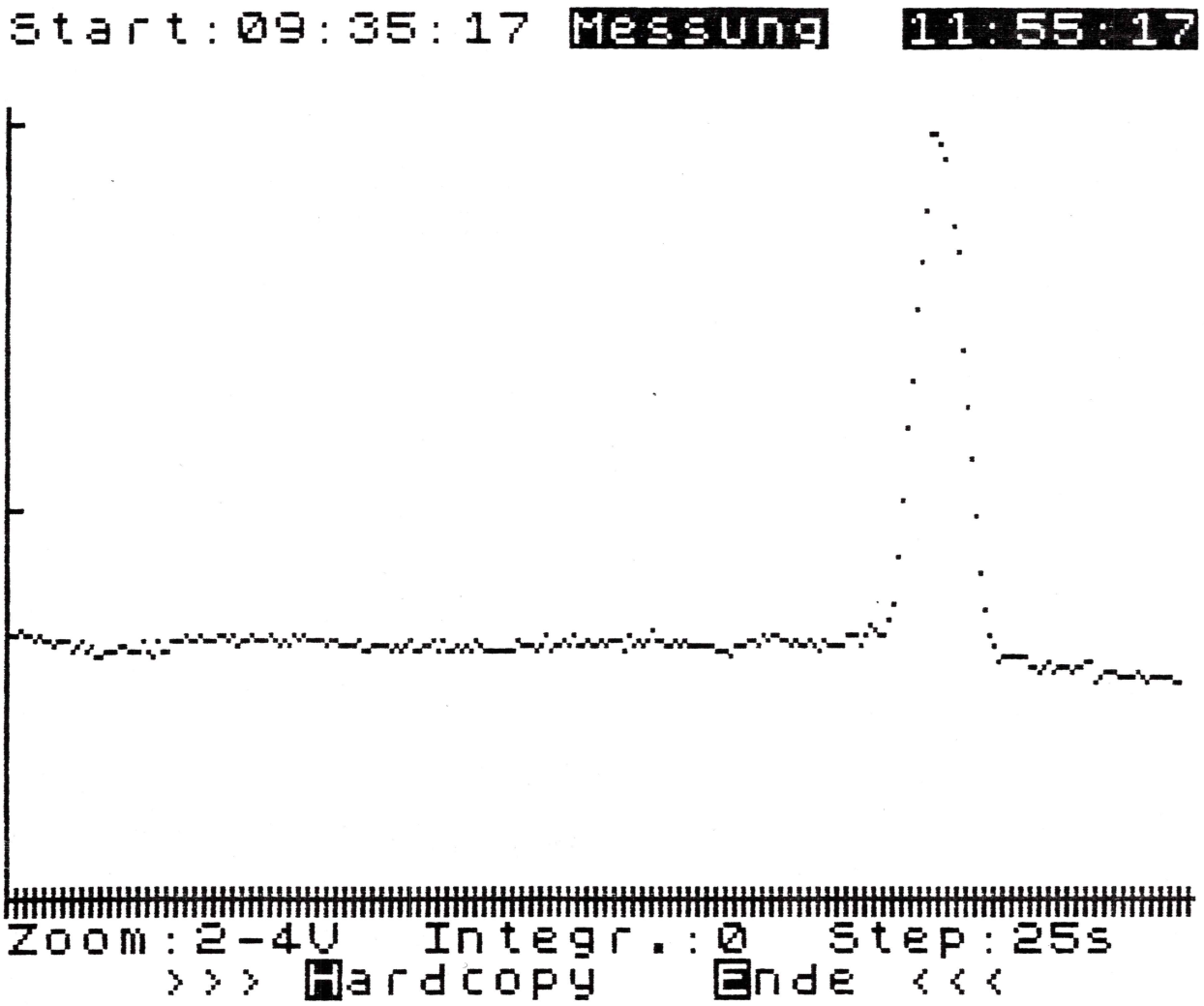
Package Configuration



Package Outline



*Dimensions for metric system are in parentheses



15.11.91 sun 11 GHz TVRO and computer Sinclair ZX Spectrum 48 k
kulmination - time 11.04 UT

SINCLAIRS AND RADIO ASTRONOMY

The graph shown above was sent by WA6DLI, who obtained it from Dieter Oslender, a friend from Germany who is using the moon in an innovative way to further his hobby of radio astronomy. Deiter looks at the microwave signals from the sun as they are reflected by the moon.

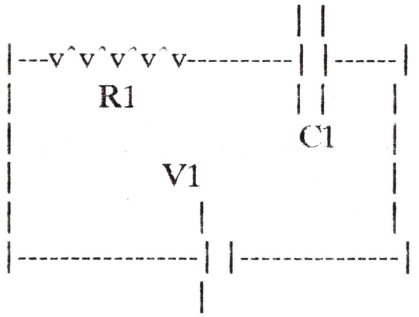
He does not track the moon with his antenna, but observes the transit of the moon though the antenna pattern of his fixed antenna. The output of his receiver is then recorded by his Sinclair computer which is used to create plots of signal strength vs time.

Dieter has a rather impressive collection of plots similar to the one shown above. He uses a European Sinclair similar to the TS2068, a Sinclair ZX Spectrum with 48 K of memory.

DOT MATRIX DIAGRAMS

K5XY

Our comuters have more graphics capabilities than many, but still there are times when they do not draw as well as we would wish. Furthermore the printers which are used often have only an ASCII character set and many think things like circuit diagrams cannot be drawn. But that is not true. One can still draw reasonable diagrams. Perhaps not easily, but with a little imagination recognizable diagrams can be produced. Consider the LCR circuit shown below.



With a little care and placement of various symbols you can make a rather readable circuit diagram.

FRIENDS

W6OOA -- Al renewed and had a few kind words to say about the new style.

WA6DLI -- Bob just obtained a new Z88. Perhaps we will hear a bit about that computer in the near future.

WA4BQE -- Ed renewed and said he was sorry to be late with the renewal. But he was not. It was just me late with the issue.

BITS AND BYTES

174 To print on line 24 of the TS2068 enter

PRINT#0;"Comment"; PAUSE 0

175 Thermal paper for the TS2040 printer can be had from Radio Shack. They call it TP-10 paper. It has catalog number 26-1332.

176 If you need a ribbon for the QL printer, try one for the Seikosha 1000 or the Radio Shack DMP 130.

177 A quicker way than the usual channel opening and closing to get a QL Superbasic program listing is to type "save ser1 <enter>.

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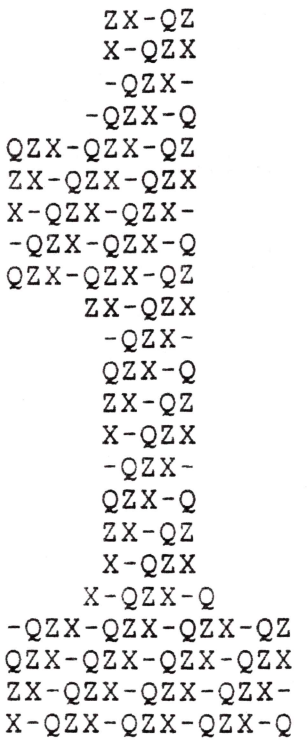

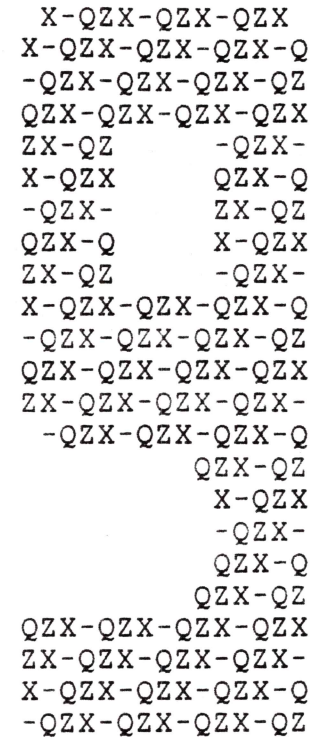

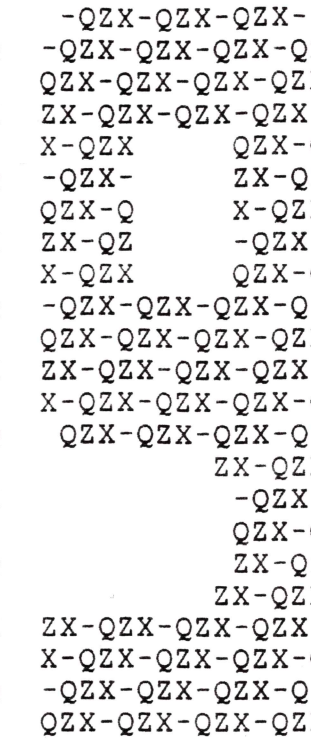

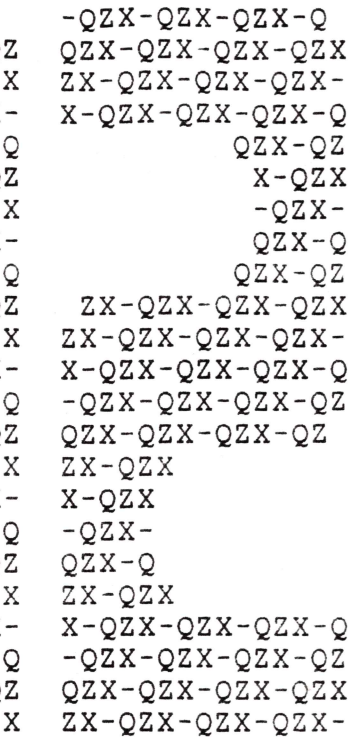

JANUARY

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OCTOBER

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NOVEMBER

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73, K5XY

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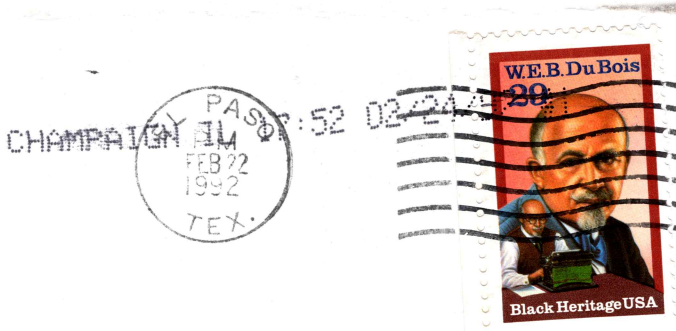

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